Modelling and Control of Transformer

To prevent expensive damages to the electrical power grid infrastructure, the installed transformers need to be tested regularly by measuring the important transformer characteristics. The difficulty of this project is linked to the large variety of different transformer found in the field. The main tasks of this project are:

- Build a general model that can depict the input-output dynamics of the most common transformer types.
- Determine the sensitivity of parameter uncertainties on the end result.
- Develop a robust control strategy that works for the large range of existing transformer.
- Investigate the influence of different iron core materials on the measurement performance.
- Generalize the gained knowledge for other electromagnetic devices.

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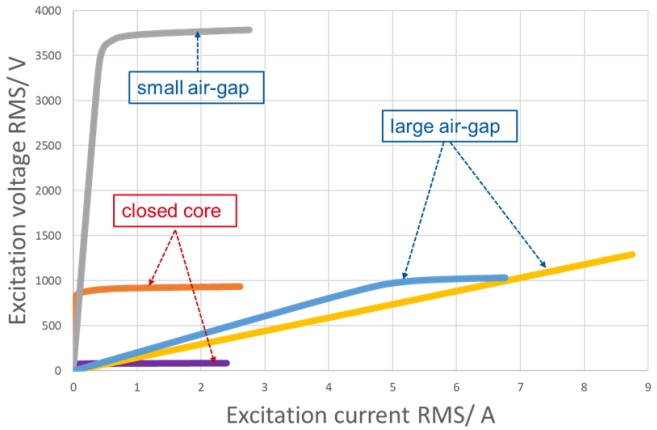

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